KDHE Division of Health
Transcription of Press Conference on Pertussis
December 15, 2005

Participants:

Ms. Sharon Watson – Director, Office of Communications

Dr. Howard Rodenberg – Director, Division of Health

Dr. Gail Hansen – State Epidemiologist, Bureau of Epidemiology & Disease Prevention

Press Conference:

Watson: Good afternoon, everyone. Thank you for joining the Kansas Department of Health and Environment this afternoon as we talk about the state's rising number of whooping cough cases. Our speakers today: Dr. Howard Rodenberg, the Division of Health Director for KDHE; and Dr. Gail Hansen, the state epidemiologist. And we'll start off with Dr. Howard Rodenberg.

Rodenberg: Thank you, Sharon, and thanks for joining us this afternoon. Normally, this time of year, you'll hear us talking about influenza, the seasonal influenza and even about pandemic influenza, which has been so much in the news. But we wanted to bring to your attention another public health concern - an additional public health concern that we're following now - and that is following the rise in cases of pertussis, or whooping cough, within Kansas. As of today, we have a total of 535 cases that have been reported to the Kansas Department of Health and Environment. 269 of these cases are laboratory-confirmed cases, and another 266 are probable cases, cases where the clinician is fairly confident that the patient does have pertussis. 61 counties within Kansas are experiencing at least one case of pertussis, and over 50% of these cases are found in four counties:

Sedgwick, Douglas, Reno, and Johnson County. Since January 1st, about 15% of all the confirmed or probable cases have been in infants less than one year of age. 21% are in the age group of 1 to 9 years; 26% are in the ten- to nineteen-year-old age group; and 38% fall in the 20-and-over adult age group. These 535 cases are compared to last year's total count of 217 cases. Prior to last year, our case counts going back to 1999 had been well below 100 cases each year. The increase in Kansas is not unique to us; this is reflective of what's been happening nationwide. We're certainly concerned about the growing number of cases in the state, particularly those of very young children. Those children who are under the age of one have a much higher risk of severe consequences and complications from cases of pertussis. In fact, the one death we've had from pertussis this year in Kansas was a young infant in South Central Kansas. That's one of the reasons we feel it's important to raise this issue today, and one of the reasons we feel that it's important to urge Kansans to get vaccinated for pertussis – especially if they have infants in the home. Make sure that getting people's infants immunized is a priority for us - and not only to get the infant immunized, but also for the caregivers of that infant to get immunized against pertussis, or whooping cough. One of the new things we have available to us to sort of fight this is a new vaccine, which has just been made available to immunize for pertussis, whooping cough, in both adults and adolescents. We now have the opportunity to give more infants protection - not only by immunizing them, as we've always encouraged people to do, but also by immunizing their caregivers against pertussis, especially at the time in their life when it can be most deadly and most severe. Now one of the questions that would rightfully come up when we talk about pertussis is "why are we seeing a rise in pertussis in Kansas?" Well, there's a number of reasons, but I want to

highlight sort of two main reasons. The first one is because now, as opposed to years past, we can do a much better job of testing and tracking the disease. Testing capabilities have recently improved – tests have become cheaper, more efficient, and faster to do – so that many commercial laboratories, in addition to the state laboratory, are able to do the test and able to identify pertussis cases faster, more accurately, easier to do. And one of the spinoffs of that is, once you start to identify more of the pertussis cases, people then naturally start looking for them more…the absolute right thing to do. And as they look for more cases, they are able to find more cases, and we have more people who are aware of pertussis, more people who come to their doctor with a persistent cough, wondering what's going on. They get the test done – and so we see these numbers starting to rise. It's a function of the fact that we can do a better job of assessing these patients, and a better job of testing for pertussis. The other thing that we see happen is we know that historically, infectious diseases like pertussis, or like whooping cough, they're historically cyclical; and outbreaks will occur sporadically at different points throughout the country at different points in time. If we look at, for example, our numbers compared with other states, we know that many other states in the country had their spikes in pertussis last year, and we're getting it this year. Again, it's a cyclical thing, it happens, we're following it closely, but our experience certainly is not unique. The other thing we find is that pertussis is a very contagious disease, so once it gets started in an area, it tends to explode, and it tends to blossom very rapidly. And while we can't control nature, and we can't control what happens to the virus - or to the bacteria, excuse me – we can make people aware of the problem and the need to continue effective vaccination processes, not only in infants as we do now, but to expand those vaccinations to adults

and adolescents now that we have some new vaccine technology available. KDHE is certainly working actively to lessen the burden of pertussis, whooping cough, on our state. And in addition to getting the word out on the need for vaccination, we're contacting physicians throughout the state this week regarding whooping cough vaccinations, recommended schedules, and the fact that our numbers are rising. This is actually the second time we've done so. We contacted health care providers this past September regarding the growing number of cases at that time, as well. Further, in January of 2005, our Bureau of Epidemiology and Disease Prevention held a series of pertussis conference calls for health care providers, doctors, and laboratory staff, and local health departments to advise them on what is going on with pertussis and what we can do as a health care community to help decrease the spread. We will continue to work with health care providers throughout the state to provide information on pertussis, guidance to families on the importance of vaccinations for infants, as well as the entire family, to prevent the ongoing spread of this contagious, potentially severe disease. With that, I'd like to turn it over to Dr. Gail Hansen, our state epidemiologist, who will talk a little bit about the clinical background of pertussis, whooping cough. So, Gail?

Hansen: Thank you. Mostly I want to talk about the symptoms of pertussis, or whooping cough - and as Dr. Rodenberg said, part of the issue is that people can be contagious with the disease, with this bacteria, before they show any signs. That's always a challenge that we face, and this is similar to many other diseases we deal with. The signs: it will usually start out similar to those of a cold, where you have a runny nose, sneezing, maybe a little bit of a mild fever and then a mild cough. That will then progress, usually, to having severe coughing spells where people cough, and cough, and cough. They have spells

where they can't catch their breath, they are coughing so badly; and when they try to catch their breath, they do what is called an inspiratory *whoop* where they make a sound just catching their breath – which is why it is called whooping cough. Often when they cough, they do cough up mucus, and for young children it can be especially difficult because they just don't breathe very well. And some young children don't have that *whoop*ing cough - they don't have those spells of coughing – they just get to the point where they can't breathe. Obviously not a good sign. The other thing people will often do is, after a spell of coughing where they have that *whoop*, they may vomit because of coughing so hard. The coughing can last for several weeks. There is medication that can be used to lessen the severity of it, and there is medication that will decrease the amount of time that people are infectious to others, but it doesn't really do a lot to decrease the number of days that you are coughing. So medication will actually take care of the bacteria, but doesn't take care of all the symptoms. So that's something that we'd like people, we want people to keep in mind. That's pretty much what I've got on symptoms.

Rodenberg: Well, we know there are probably a number of questions out there about pertussis, about whooping cough, and we'd be happy to entertain them at this time. Yes sir?

Reporter: Well, I guess my question is it doesn't sound like we have an actual rise in cases throughout the state. We are doing a better job of catching them so that maybe two years ago, we actually had as many as we're having this year, they just went unreported. Is that right?

Hansen: We really have a combination of things going on so that I think that we really do have a rise, and especially when we look at the cases. When we look at cases where

we know we've found it from laboratory, but also those that are reported to us from physicians, or we don't have a laboratory, we still are seeing a rise. We do really have 3- to 5-year cycles, which we are at the top of one of those 3- to 5-year cycles now. So I think we have a combination of yes, we are looking for it, and we are better able to detect it, but that's on top of having actual increases in cases.

Reporter: So do you have a sense for…maybe how much of this…I mean, right now it looks like it's more than doubled, from the statistics. If we hadn't been doing a better job of reporting, would these numbers be going from like 300 to 500?

Rodenberg: You know, I don't know if it's really an issue of doing a better job of reporting. I think what we're finding is that we have new tools and new technology, and we can do more accurate reporting. We're able to assess people for pertussis where maybe we weren't able to before. So I think that's why we're getting these numbers. I think our numbers are probably more accurate now, and I think Dr. Hansen is right: to some extent, when you're looking for it, you do find more. But the reason we are looking for it is that there was an actual, concrete rise, and then that has heightened our surveillance in turn.

Reporter: This is a question about the regular vaccination battery that all kids get – that they have to get – to get into school. Why are we seeing people at the school age, school-age-groups that are getting it?

Hansen: There are several reasons. One is that obviously, no vaccine is 100% effective, so we have a little piece of that going on. We also have one of the things that we have figured out - and when I say "we" I am talking about the bigger health and public health community - is that as children, they get their vaccinations as required for school entry.

When they get their last vaccine, which is usually at the age of five, after that time their immunity wanes, so that they are more susceptible to getting pertussis as they get older. So as they go through elementary school and middle school, they are susceptible again to getting pertussis because getting that vaccine isn't a lifetime immunity.

Reporter: So when do they get the next one? In high school?

Rodenberg: Well, I'm glad you mentioned that, to new vaccine that I mentioned. Children at the high school age, adolescents, do get boosters. What they usually get a booster of is something called a Dt, basically a tetanus shot/booster. The new product that has been licensed for use in adults and adolescents is sort of an older kids' DtaP. Right now we give infants something called a DtaP, which combines tetanus, diptheria, and pertussis, or whooping cough; and what we've got now is that now we have a new vaccine shown to be safe and effective for adolescents and older kids. So we actually have a new vaccine to offer for that age group, which accounts for the fact that we don't have a lifelong immunity from that first round that we thought we might have had.

Reporter: What has happened particularly in that we're better and we're able to be more accurate in our tracking of pertussis?

Hansen: There's lab tests now that we didn't have before, technologies. We can look for the DNA - the genes - of the bacteria. In the past what we've had to do is culture, to get that bacteria actually to grow in the laboratory. It grows very well in people's lungs, it doesn't grow well in a petrie dish in the lab. So we now have new technology where we don't have to get it to actually grow, we're looking for the signs of it. It's technology that's been around for several years, but being able to make it available and useful and at a reasonable cost, for pertussis, has been a fairly recent phenomenon – really within the

last couple of years. So the technology has been around for a while, but being able to hone it into this specific bacteria is newer.

Reporter: How about some other prevention methods?

Hansen: We have some other things we can do for prevention, but vaccine is our best prevention. It is a very easily-transmitted bacteria, so you don't have to be very close to somebody, and then it's spread by droplets. So if someone coughs or sneezes - and like I said, you can cough or sneeze and spread that bacteria before you have any signs - you may think you have just signs of something fairly innocuous. Obviously anything you can do to keep those droplets from spreading – so covering your cough when you're sneezing or coughing, even if you are not feeling particularly bad – is always a good thing. And once again, as we talk about with many other diseases, washing your hands so you don't touch something and then spread it. Covering your cough.

Rodenberg: Let me just reinforce something on vaccination. All the basic stuff is the right thing to do: you know, cover your cough, hand washing, all the basic stuff. Vaccination really is the lynchpin. We were just looking at some data this morning, and if you have any doubt about the efficiency of vaccination at preventing this disease. In 2001 there were 250,000 children in this world who died of pertussis. Most of that was in developing countries. Most of that was in places where vaccine isn't available. So if there's any other…if you needed another reason to show the impact and the efficacy of vaccination for this, I think that's a pretty good one.

Reporter: When was the last really serious epidemic of pertussis? I guess maybe this isn't. Would you describe this as a serious epidemic? When was the last time we had an epidemic?

Hansen: As we said, it sort of comes in 3- to 5-year cycles, and at the top of each one of those cycles is what we consider an outbreak. An outbreak, or an epidemic, is just more cases than we would normally see. Dr. Rodenberg talked about worldwide deaths, but if you also look at historically, back in the 1940s before we had vaccines, we would have 200,000 people or more with pertussis every year. You would watch the numbers go down every year as vaccination programs came on. So putting it in the context of before vaccines, or sort of before vaccines and after vaccines, every 3 to 5 years we have a spike of cases.

Reporter: In the regular battery of vaccinations that you give in the first 2 years, when do you get your first DtaP shot?

Rodenberg: It is…you actually get a series of four of the DtaP's during the first 2 years of life. So you don't get just a single shot, you get a series of four to get the first sensitivity and to build the immunity.

Hansen: And we usually start that at 2 months of age, but then it's a series of vaccinations.

Reporter: We inoculate pretty much any kid that is born in a hospital. I mean, before you take them home, they've already had at least one. So why are there so many kids under age one who are getting pertussis despite the pretty high vaccination rate for that age group?

Rodenberg: Well, I think there are a couple of issues there. We do do inoculations of kids for certain things in the hospital. We don't…the DtaP isn't used on the newborns. So you give that shot at about two months of age. The other thing I think, too, is that the immunizations are spaced out. The way that immunizations work is that you have to

build up more and more immunity. It's not like a one-shot-it's-fixed thing. It would be nice if it would, but unfortunately it's not that way. So what happens is sometimes children either A) will not get immunized, and it's unfortunate that sometimes children do fall through the cracks. I think we work very hard with all of our community partners to make sure that doesn't happen. So certainly there's that unimmunized group out there. One of the other things that can happens, though, is children can be getting the series, but they wouldn't have reached their full level of immunity yet. Again, it's not a one-shot-and-it's-fixed. So I think some of the children probably fall in that area, that range, as well.

Hansen: Until they really finish the full compliment of vaccinations, they're not fully protected. And keeping in mind that no vaccine is 100% effective, even for children that have been completely vaccinated, but that gives us the very best protection. But they really have to have that full series before they are under that protection.

Rodenberg: The thing that's key for us is getting that series started as soon as possible. So if we can get the whole series in by eighteen months, as opposed to two years, you've given that child six extra months of protection. That's the biggest thing for us is getting that vaccine series started early and continuing it on a consistent basis.

Reporter: Do you have a county-by-county breakdown available anywhere?

Hansen: Certainly, with the larger counties, we do keep breakdowns by year. We have an annual summary that comes out at the end of the year. We don't have all of it for 2005, because we obviously we're not done with the year yet.

Reporter: Ok, so I would be able to get last year's for a particular county, but there's no information yet for this year? I couldn't get up 'til now, that there have been this many cases in this county, and so on?

Hansen: Well, the information is, like I said, still preliminary. We certainly have it available for 2004. It's available on our website.

Reporter: Say I am aged 41, and I work in a daycare center. I am a hypochondriac, and I am worried about this. Should I run out and get a vaccination against pertussis? If I'm in my 40's, do I need to worry about this? Are there just some high-risk jobs like daycares, teachers, etcetera?

Hansen: When we think about "high risk," the highest risk is to those children under the age of one, because those are the people who are most likely to suffer severe consequences. So about hypochondria, I don't know. But it's in order to protect the children, so that you don't make children ill whom you are caring for. The vaccine was not available earlier, and now it's available for them.

Reporter: When did it become available?

Hansen [to Rodenberg]: When did it become available for the adults and adolescents?

Rodenberg: It's been less than a year, since the spring I think.

Hansen: Yeah, since the spring.

Reporter: Describe the vaccine, where you go to get it, how much is it going to cost us?

Rodenberg: Every physician's office - every wholesaler - prices a little bit differently, so I would probably give you wrong information if I quoted you a price. Really it's the same kind of vaccine, although it had never really been evaluated for efficacy and safety in adults and adolescents. In the last several years, they have been doing that work and have

been able to show that the vaccine works in adults and adolescents and doesn't cause any side effects that we know of. So it's not that the vaccine is necessarily different, or built differently, or has any different contents. It just hadn't been evaluated in that population.

Reporter: Is this available to everybody, anybody? And if you're not treated, how does that work out?

Rodenberg: Well, what we've seen is only one fatality in Kansas, as I mentioned. Where we really worry about fatalities are in infants and young children, because they have fairly small airways, fairly small lung volumes. So when they have the problems with inspiration, when they have a lot of thick mucus that really clogs their airway up, then they are at much higher risk. With prompt medical treatment, pertussis is treated very well, and most children do well. We [adults] don't see that same degree of complication simply because we have bigger airways, and it's easier for us to handle this. Nonetheless, the disease can put you out of work, it can make your family miserable - you run the risk of transmitting it to other people. So even though the risk of death and of having a very severe case is much less in adults, we still recommend that if people do have a persistent cough, persistent fever, by all means, see your healthcare provider.

Reporter: So can it lead to other things?

Hansen: We can get those complications, once again, as it is a bacteria, and a bacteria that – luckily for us – is very treatable with antibiotics. Your healthcare provider may not give you antibiotics without knowing what it is, one would hope, but the antibiotics for pertussis work very well to keep people from having more complications. Once again, complications tend to be in young children, and people a couple of years older than

toddlers will have a persistent cough which can be irritating, but not something that would put you in the hospital, most of the time.

Reporter: Who was the fatality?

Rodenberg: It was an infant in South Central Kansas. A two-month old infant. We can't release the name due to confidentiality.

Hansen: It was in the summer of 2005.

Reporter: Should we assume that kids have had all their shots? Or should we be checking with their doctor?

Rodenberg: I think that if you do have a child who is entering early adolescence, I think it is probably worth checking with that child's physician to see if they're administering that vaccine, if they believe that that child would benefit from that. I think it's probably worth checking.

Reporter: Have there been any shortages of this vaccine?

Hansen: We haven't heard of any shortages, so far.

Rodenberg: Well thank you very much for coming. We appreciate your time, and if there are any further questions we can answer, you can sure let us know. Thanks.